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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,718	05/23/2001	Jiren Gu	30660/205648	2799

26959 7590 12/08/2003

MONIQUE A. MORNEAULT  
311 S. WACKER DRIVE  
53RD FLOOR  
CHICAGO, IL 60606-6622

EXAMINER
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NAKARANI, DHIRAJLAL S

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 12/08/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/864,718

Applicant(s)

GU, JIREN

Examiner

D. S. Nakarani

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26,28-35 and 37-43 is/are pending in the application.
- 4a) Of the above claim(s) 1-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25,26,28-35 and 37-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

### DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-24 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 8.
3. Claim 35 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 35, line 4, the phrase "a porous substrate" renders claim confusing and indefinite. It is not clear from the claim language whether "a porous substrate" is referring to the cellulosic substrate or it is different than the cellulosic substrate? If it is referring to the cellulosic substrate than either the phrase "a porous" should be changed to the phrase -- the cellulosic -- or in lines 2 and 3, the term "cellulosic" should be changed to the phrase -- porous cellulosic -- and in line 4, the phrase "a porous substrate" should be changed to the phrase -- the porous cellulosic substrate --. If it is different than the cellulosic substrate, the location of "a porous substrate" in respect to the cellulosic substrate is unclear.

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4. Claims 22, 26, 29 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Thompson et al (U. S. Patent 4,513,036) for the reasons of record set forth in paragraph 6 of the Office Action mailed June 9, 2003 (Paper No. 10).

5. Claims 25, 26 and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rausing et al (U. S. Patent Re 27,610) for the reasons of record set forth in paragraph 10 of the Office Action mailed November 1, 2002 (Paper No. 5).

6. Claims 25, 26, 28-35 and 37-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patterson et al (U.S. Patent 4,859,511) in view of Rausing et al (U. S. Patent Re 27,610) and Osgood, Jr. et al. (U. S. Patent 4,855,187) for the reasons of record set forth in paragraph 11 of the Office Action mailed November 1, 2002 (Paper No. 5).

7. Applicant's arguments filed September 8, 2003 have been fully considered but they are not persuasive.

In reference to rejection of claims 25-27, 29 and 30 under 35 USC § 102(b) as being anticipated by Thompson et al. (U. S. Patent 4,513,036), applicant mainly argue that in order for a reference to act as a § 102 bar to patentability, the reference must teach each and every element of the claimed invention. Thompson et al do not teach each and every element of the claimed invention, specifically as amended. Thompson et al disclose a laminate of a paperboard substrate to which is applied a propylene

polymer. Overlaying the polypropylene web is a web of heat-sealable olefin polymer. To enhance adhesion between the olefin polymer layer and the propylene polymer web, an adhesive layer, such as EMA, can be deposited between the layers. Other means to enhance adhesion include treating the propylene coated paperboard by flame treatment, corona discharge or the like, and subsequently over coating the propylene polymer barrier web with a web of olefin polymer. The present invention is directed to a co-extruded polymer coated sheet material. Specifically the polymers are co-extruded on to a cellulosic substrate so that the molten polypropylene layer is adjacent the surface of the substrate and is sandwiched between the substrate and the second polymer layer. The molten polypropylene layer penetrates into at least a portion of the substrate layer. The resulting multi-layer sheet material exhibits good inter laminar bonding such that the adhesive strength between the polypropylene polymer layer and the substrate is greater than the cohesive strength of the cellulosic substrate. The present application discusses the disadvantages of pretreatment steps to enhance the bonding of polypropylene to a paper substrate. Thompson et al as per claim 1, the polypropylene layer having an inner surface, which has been treated to enhance adhesion. The present invention does not require it.

These arguments are unpersuasive because the invention as claimed is an open language and inclusive of layer of EMA. Furthermore Thompson et al's disclosure is not limited to the claim 1 and/or Example; the propylene polymer and olefin polymer webs can be directly co-extruded onto the paperboard substrate (col. 4 lines 14-17).

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Thompson et al do not disclose pretreatment step to enhance the bonding of polypropylene to a paperboard substrate.

In reference to rejection of claims 25, 26 and 28-31 under USC § 103(a) as being unpatentable over Rausing et al (Re 27,610), applicant mainly argue that Rausing et al do not teach co-extruding the polymer layers onto the substrate. Further, Rausing et al describe and claim that the layers are prevented from being pressed into each other. In present invention, the polymers are co-extruded onto support substrate so the co-extruded molten polypropylene layer penetrates into at least a portion of the substrate layer.

These arguments are unpersuasive because the co-extrusion is a process step and bears no patentable weight in determination of patentability of the product unless shown that the laminate of present invention is different than the prior art product made by extrusion lamination. There is nothing on record showing that the claimed product is different than the prior art product.

In reference to rejection of claims 25-43 under 35 USC § 103(a) as being unpatentable over Patterson et al (U. S. Patent 4,859,511) in view of Rausing et al and Osgood, Jr et al (U. S. Patent 4,855,187), applicant has mainly repeated the arguments stated in the remarks filed February 10, 2003 (Paper No. 8).

Those arguments are unpersuasive for the reasons stated in the paragraph 10 of the Office Action mailed June 9, 2003 (Paper No. 10).

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

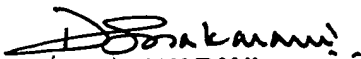
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. S. Nakarani whose telephone number is 703-308-2413. The examiner can normally be reached on Tuesday-Friday from 7:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Paul J. Thibodeau, can be reached on (703) 308-2367. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

D. S. Nakarani/mn  
November 18, 2003

  
**D. S. NAKARANI**  
**PRIMARY EXAMINER**